REMARKS

In the Office Action, the Examiner rejected the claims under 35 USC §103. New claim 36 has been added. Claims 1-36 are now pending. The rejections are fully traversed below.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS UNDER 35 USC §103

In the Office Action, the Examiner rejected claims 1-6, 22-24, 26-27, and 32-35 under 35 USC §103 as being unpatentable over Cloonan Patent No. 2002/0066110 A1, ('Cloonan' hereinafter) in view of Ansley, Patent No. 7,072,365 B1, ('Ansley' hereinafter).

Cloonan discloses a cable modem termination system (CMTS), which reduces the time required to switch over traffic from a failed circuit to a back up circuit. FIG. 1 shows a single CMTS. As shown and described with reference to FIG. 2, the CMTS includes a number of cable interface cards. If a fault is discovered on one of the active cable interface cards, then the protection switch can re-route the traffic using the spare cable interface card. See paragraph [0028].

Cloonan discloses a single CMTS. As set forth above, Cloonan relates to the failure of a circuit within a CMTS and the copying of parameters from an active circuit into a spare circuit. Even if the Cloonan is interpreted to include a backup CMTS (e.g., spare circuit) and an active CMTS (e.g., active circuit), there is no indication that the parameters that are copied include subscriber information. More particularly, with respect to claim 1, Cloonan neither discloses nor suggests receiving by a backup cable modem termination system subscriber information

associated with one or more cable modems from an active cable modem termination system. Moreover, while the Examiner cites paragraphs 14 and 32, these portions of Cloonan fail to disclose or suggest prioritizing cable modems in any manner. Thus, Applicant respectfully submits that Cloonan fails to disclose or suggest prioritizing by a backup cable modem termination system the cable modems using at least one of the subscriber information or a time of receipt of the subscriber information, the prioritized cable modems indicating an order in which the transmission of messages between the one or more cable modems and the backup cable modem termination system is to be restored. Applicant also respectfully submits Cloonan also fails to disclose the polling of cable modems in any manner. It follows that Cloonan fails to disclose or suggest a backup cable modem termination system polling the cable modems in the order indicated by the prioritized cable modems, thereby enabling the transmission of messages between the one or more cable modems and the backup cable modem termination system to be restored.

The Examiner admits that Cloonan fails to teach "wherein receiving, prioritizing and polling by the backup cable modem termination system." The Examiner seeks to cure the deficiencies of Cloonan with Ansley.

Ansley discloses a system and method for multiplexing broadband signals. See Title. The cable modem termination system may have receivers tuned to individual slots allocated to data feeds, such as Internet, video, telephony or other sources, and route those sources over the Internet. Upon a failure condition within any given receiver or other component, a backup cable modem termination system, connected to the same common bus as the main or active system, may be rapidly activated by having backup receivers contained in that unit tuned to appropriate frequencies to pick up the signals within the corresponding band. See Abstract.

In summary, the backup cable modem termination system of Ansley is merely connected to the same common bus as the active CMTS. Thus, Ansley neither discloses nor suggests a

backup CMTS receiving subscriber information from an active CMTS. Moreover, Ansley fails to disclose or suggest prioritizing cable modems in any manner, and therefore fails to disclose or suggest prioritizing cable modems by a backup CMTS, as claimed. In addition, Ansley fails to disclose or suggest the polling of cable modems in the prioritized order (by a backup CMTS or otherwise). Therefore, Applicant respectfully asserts that Ansley fails to cure the deficiencies of Cloonan.

The Examiner cites FIG. 5, col. 1, lines 38-52; col. 2, lines 38-50; col. 4, lines 5-68 of Ansley. Col. 1, lines 38-52 of Ansley discloses that a switch transfers incoming signals to a backup CMTS. In addition, col. 2, lines 38-50 of Ansley discloses a frequency selectable CMTS that may be backed up by another frequency selectable CMTS acting as a backup unit, connected to the same bus as the main CMTS to the multiplexer module. Upon failure or malfunction of any individual receiver or of the entire active CMTS, failover may be accomplished by tuning the backup frequency selectable CMTS to appropriate frequency channels driving on the bus to which both receivers are mutually connected. Col. 4, lines 5-68 of Ansley further discloses that backup receivers of the backup CMTS or the entire backup CMTS may be activated and substituted for the faulty receiver or CMTS via frequency tuning to the common bus.

There is no indication in Ansley that the backup CMTS receives subscriber information from an active CMTS. In addition, the cited portions of Ansley fail to disclose or suggest that the backup CMTS prioritizes cable modems. Moreover, the cited portions of Ansley fail to disclose or suggest the polling of cable modems in a prioritized order by a backup CMTS.

The Examiner asserts that "[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cloonan in view of Ansley so that the system would be able to switch and activate the cable modem once detected the failure. One would be motivated to do so to protect the system once experience the failure." Applicant respectfully traverses this assertion.

It is important to note that the claimed invention provides numerous advantages over the cited art. More specifically, the Background section of Applicant's specification addresses the problems associated with time outs, particularly when real-time traffic such as voice or video data is being transmitted. The cited art, separately or in combination, fails to disclose or suggest this problem. Similarly, the cited art, separately or in combination fails to disclose or suggest a solution to this problem (e.g., by prioritizing the cable modems and polling the cable modems in the prioritized order).

Neither of the cited references, separately or in combination, discloses or suggests communication between an active CMTS and a backup CMTS in the manner claimed. As a result, neither of the cited references, separately or in combination, discloses or suggests prioritizing cable modems by a backup CMTS, or polling the prioritized cable modems by a backup CMTS. In view of the above, the combination of the cited references would fail to operate as claimed. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of the claims under 35 USC 103.

In the Office Action, the Examiner rejected claims 7-21, 25, and 28-29 under 35 USC §103 as being unpatentable over Cloonan in view of Ansley and further in view of Gummalla, U.S. Patent Number 6,999,414 B2, ('Gummalla' hereinafter) This rejection is fully traversed below.

Applicant respectfully submits that Gummalla fails to cure the deficiencies of the primary references. It is also important to note that Gummalla relates to the combining requests for data bandwidth by a data provider for transmission of data. See title. The Examiner asserts that it

would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cloonan in view of Gummalla to increase the efficiency of providing requested bandwidth data. The Examiner further asserts that "one would be motivated to do so to distribution data from the CMTS to the cable modem." However, it is important to note that the claimed invention does not directly relate to the distribution of data, but rather the establishing of communication between a backup CMTS and one or more cable modems. Thus, even if the references were combined, they would fail to achieve the desired result, which is to restore communication between a backup CMTS and one or more cable modems upon failure of an active CMTS. Accordingly, Applicant respectfully submits that claims 7-21, 25, and 28-29 are patentable over the cited references.

The Examiner rejected claims 30-31 under 35 USC §103 as being unpatentable over Cloonan in view of Ansley and further in view of Burroughs, U.S. Pub. No. 2002/0144284 A1, ('Burroughs' hereinafter). This rejection is fully traversed below.

The Examiner seeks to cure the deficiencies of Cloonan and Ansley with Burroughs. However, Burroughs fails to cure the deficiencies of the primary references.

Burroughs discloses arranging cable modems and CMTS modules, connected to a single cable so as to provide cable modem service to a respective set of the cable modems, are arranged so one of the CMTSs can backup the other. Each of the CMTSs simultaneously broadcasts its downstream channel on its own assigned one of the cable channels that is accessible by the cable modems for which it is assigned to provide the primary downstream channel, and each cable modem is assigned in addition to its primary downstream channel at least one alternative downstream channel which is supplied by a CMTS other than its primary CMTS, so that when

the primary downstream channel of a cable modem becomes invalid the cable modem switches to the alternative downstream channel. See Abstract.

It is important to note that Burroughs requires that the cable modem provide parameters to the CMTS. See page 5, paragraph 48. More particularly, Burroughs discloses the transmission of a registration request message from a cable modem to the CMTS. See page 4, paragraph 37. This process is performed when the cable modem determines that the primary downstream channel is not valid. See page 3, paragraph 32. As a result, the intelligence (e.g., switching to a downstream channel) is implemented in the cable modem rather than the CMTS. Burroughs fails to disclose or suggest communication between two different CMTSs.

Moreover, Burroughs requires that the cable modems actively switch to a backup CMTS, as well as provide parameters to their backup CMTS. As a result, Burroughs teaches away from communicating between a backup CMTS and an active CMTS. Moreover, since the cable modems actively initiate communication with their backup CMTS, it would be unnecessary for the backup CMTS to prioritize the order in which communication with the cable modems should be established. Similarly, it would be unnecessary for the backup CMTS to poll the cable modems to establish communication. As such, Applicant respectfully submits that Burroughs teaches away from the claimed invention. Accordingly, Applicant respectfully submits that claims 30-31 are patentable over the cited references.

SUMMARY

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388 (Order No. CISCP251).

Respectfully submitted,

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